

## SAFETY DATA SHEET

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**Section 1: Identification**

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Day of issue: 2017-04-19

**Product identifier:**Ceramir<sup>®</sup> Crown & Bridge QuikCap**Recommended use of the chemical and restrictions on use:**

Dental cement intended for permanent cementation of restorations.

Uses advised against: Applications other than the intended use.

**Details of the supplier of the safety data sheet:****Manufacturer:**

Doxa Dental

Axel Johanssons gata 4-6 Tel.: +46 (0) 18 478 20 00 1(855)Doxa – USA (369-2872)

SE-754 50 Uppsala

SWEDEN

**US and Canada contact:**

Doxa Dental Inc.

1(855)Doxa – USA (369-2872)

www.ceramirUS.com

Responsible for SDS (e-mail): [info@doxa.se](mailto:info@doxa.se)**Emergency phone number:**

For information Canada (CANUTEC) call: 613-996-6666

Poison Emergency call 1-800-222-1222 (anywhere in the US)

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**Section 2: Hazard identification**

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The product is not controlled under WHMIS 2015 or GHS, but as a medical device under Medical Devices Regulation SOR/98-282. The labelling text is therefore shown below for safety purposes.

**Physical hazards** Not applicable**Health hazards** Not applicable**Environmental hazards** Not applicable**Label elements:****Signal word**

None

**Symbol(s)**

None

**Hazard statement(s)**

None

**Precautionary statement(s)**

None

**Other hazards not otherwise classified:**

Do not use in patients who have an allergy to polyacrylic acid. In very rare cases, the product may cause hypersensitivity symptoms in some patients. Discontinue use of the product if such symptoms occur and consult a doctor.

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**Section 3: Composition/Information on ingredients**

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**Mixtures:** The product consist of a powder base and a liquid base enclosed in a capsule (content 0.5 g).**Hazardous Components according to GHS:**

% w/w	Substance name	CAS No.	Note
5-<10	Polyacrylic acid	9003-01-4	-
<5	Strontium fluoride	7783-48-4	-
<5	Tartaric acid	87-69-4	-

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## Section 4: First-aid measures

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**First aid measures by route of exposure:**

Inhalation: Remove to fresh air. Get medical attention if any discomfort continues.

Skin contact: Wash skin thoroughly with soap and water. If irritation occur: Seek medical advice.

Eye contact: Flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any.  
If irritation persists: Seek medical advice.

Ingestion: Rinse mouth and drink plenty of water. **Do not induce vomiting.** Keep at rest. Get medical attention if any discomfort continues.

**Most important symptoms and effects (acute or delayed):**

Inhalation of dust may irritate throat and respiratory system and cause coughing. May cause slight irritation of skin and eyes. May cause hypersensitivity symptoms in some patients.

**Immediate medical attention and special treatment needed, if necessary:**

Show this safety data sheet to a physician or emergency ward. Treat symptomatically.

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## Section 5: Fire-fighting measures

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**Suitable extinguishing media / Unsuitable extinguishing media:**

Dry-powder, water mist (never water jet), alcohol resistant foam or carbon dioxide (CO<sub>2</sub>).

**Specific hazards arising from the chemical:**

Not combustible. In case of surrounding fire the product may form hazardous decomposition products such as hydrofluoric acid.

**Special protective equipment and precautions for fire-fighters:**

When extinguishing fires use breathing apparatus with an independent source of air.

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## Section 6: Accidental release measures

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**Personal precautions, protective equipment and emergency procedures:**

Use personal protective equipment - see section 8. Avoid generation and spreading of dust.

Do not empty into drains. Inform appropriate authorities in accordance with local regulations.

**Methods and materials for containment and cleaning up:**

Sweep up and place in a suitable container. Flush area of spill with plenty of water. Further handling of spillage - see section 13. Inform appropriate authorities in accordance with local regulations in case of leakage into sewers etc. and dispose of contents/container in accordance with applicable national regulations.

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## Section 7: Handling and storage

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**Precautions for safe handling:**

Use only as described in "Instruction for use".

Provide adequate ventilation. Avoid contact with skin and eyes. Wash with water and soap after work. Do not eat, drink or smoke during use.

**Conditions for safe storage (including incompatible materials):**

Store dry at temperatures between +4 and +25°C. Keep away from substances mentioned in section 10.

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## Section 8: Exposure controls/Personal protection

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**Control parameters, including occupational exposure guidelines**

Occupational exposure limits:

	ACGIH TLV	Cal/OSHA PEL	NIOSH REL	Alberta OHS Code 2009 (8h)
Strontium fluoride (as F) (listed under Fluorides)	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>

American Conference of Governmental Industrial Hygienists = ACGIH      Threshold Limit Value = TLV  
National Institute for Occupational Safety and Health = NIOSH      Recommended Exposure Limit = REL

Other exposure limit used or recommended: None known.

**Appropriate engineering controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Provide adequate ventilation in working areas to keep airborne concentrations low.

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## Section 8: Exposure Controls/Personal Protection (continued)

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**Individual protection measures (e.g. personal protective equipment):**

PPE must follow OSHA regulations found in 29 CFR 1910.132 and should be chosen in collaboration with the supplier of such equipment. The recommended PPE and the specified standards are only suggestions, as a risk assessment of the relevant current work/operation may lead to other control measures.

**Eye/face protection**

Wear tight fitting safety goggles (as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or EN166).

**Skin/hand protection**

By prolonged contact: Wear protective gloves of for instance nitrile rubber. Breakthrough time of the ingredients is not available. Discard gloves at any suspicion of contamination.

**Respiratory protection**

Respiratory equipment is normally not required. In case of dust formation: Use a NIOSH/MSHA or EN149 approved respirator with a particle filter type P2. The filter has a limited lifetime and must be changed. Read the instruction.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

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## Section 9: Physical and chemical properties

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Appearance (physical state, color, etc.):	Capsules
Odour:	No characteristic odour
Odour threshold:	Not determined
pH:	Not determined
Melting point/Freezing point (°C):	Not determined
Initial boiling point/boiling range (°C):	Not determined
Flash point (°C):	Not determined
Evaporation rate:	Not determined
Flammability (solid; gas):	Not relevant
Upper/lower flammable/explosive limits (vol-%):	Not determined
Vapour pressure:	Not determined
Vapour density:	Not determined
Relative density:	Not determined
Solubility:	Insoluble in water
Partition coefficient - n-octanol/water:	Not determined
Auto-ignition temperature (°C):	Not determined
Decomposition temperature (°C):	Not determined
Viscosity:	Not relevant

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## Section 10: Stability and reactivity

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**Reactivity:**

Capsule content reacts with water.

**Chemical stability:**

Stable under normal conditions and recommended use.

**Possibility of hazardous reactions:**

None known.

**Conditions to avoid:**

Water and moisture.

**Incompatible materials:**

Strong oxidizers, strong acids and strong bases.

**Hazardous decomposition products:**

When heated to high temperatures (decomposition), the product emits very toxic fumes such as oxides of carbon and strontium and corrosive hydrogen fluoride.

## Section 11: Toxicological information

### Information on toxicological (health) effects:

**Likely routes of exposure:** Inhalation, skin and ingestion.

**Symptoms:**

Symptoms may occur if dust is released from the capsule by accident.

**Inhalation:**

Inhalation may cause irritation of the respiratory system.

**Skin contact:**

May cause slight irritation with redness.

**Eye contact:**

May cause slight irritation with redness and stinging.

**Ingestion:**

May cause irritation of the gastrointestinal tract, nausea, vomiting, salivation, fever and headache.

**Delayed and immediate effects and chronic effects from short-term and long-term exposure:**

High concentration of inorganic fluorides may cause skeletal fluorosis with symptoms such as periodical pain and stiffness in the joints, headache, abdominal pain and muscle weakness. Later osteoporosis and bone damages may occur. Loss of weight. Anorexia and anaemia are common findings in fluorine poisoning. Skin sensitization to polyacrylic acid may occur in very rare cases. Symptoms are redness, itching and eczema.

**Acute toxicity**

Hazard class	Data	Test	Data source
Acute toxicity:			
Inhalation	No available data	-	-
Dermal	LD <sub>50</sub> (rat) > 2000 mg/kg (Tartaric acid)	OECD 402	RTECS
Oral	LD <sub>50</sub> (rat) = 2500 mg/kg (Polyacrylic acid)	No data	Supplier
	LD <sub>50</sub> (rat) > 10600 mg/kg (Strontium fluoride)	No data	RTECS
	LD <sub>50</sub> (rat) > 2000 mg/kg (Tartaric acid)	OECD 423	RTECS
Corrosion/irritation:	Irritant to skin and eyes (Polyacrylic acid)	No data	Supplier
	In vitro eye irritant (Tartaric acid)	OECD 437	ECHA diss.
	No skin irritation, rabbit (Tartaric acid)	OECD 404	RTECS
Sensitization:	Not a skin sensitizer (Tartaric acid)	OECD 429	RTECS

The chemical, physical and toxicology properties of strontium fluoride have not been thoroughly investigated and recorded.

**Mutagenic toxicity**

No available data/insufficient data.

**Reproductive toxicity**

No available data/insufficient data.

**Carcinogenic toxicity**

No available data/insufficient data.

Substances are not mentioned on NTP's Report on Carcinogens (RoC), latest ed.

Substances are not found to be potential carcinogens in IARC Monographs, or by OSHA.

**Specific Target Organ Toxicity – single exposure / repeated exposure**

No known effects.

**Aspiration toxicity**

No known effects.

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## Section 12: Ecological information

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**Ecotoxicity:**

Aquatic	Data	Test (Media)	Data source
Fish	LC <sub>50</sub> (Brachydanio rerio, 96h) > 100 mg/l (Polyacrylic acid)	No data (FW)	Supplier
Crustaceans	EC <sub>50</sub> (Daphnia magna, 48h) > 100 mg/l (Polyacrylic acid)	No data (FW)	Supplier
	EC <sub>50</sub> (Daphnia magna, 48h) = 93.3 mg/l (Tartaric acid)	OECD 202 (FW)	Supplier
Algae	EC <sub>50</sub> (Scenedesmus subspicatus, 72h) > 180 mg/l (Polyacrylic acid)	No data (FW)	Supplier
	EC <sub>50</sub> (Algae, 72h) = 51.4 mg/l (Tartaric acid)	OECD 201 (FW)	Supplier

**Persistence and degradability**

Methods for determination of degradability are not valid for inorganic compounds.

Polyacrylic acid is not considered readily biodegradable.

Tartaric acid was degraded 85% in 28 days at an OECD 306 test and is considered rapidly degradable.

The cured product is not expected to be biodegradable.

**Bioaccumulative potential**

Polyacrylic acid: Log K<sub>ow</sub> = 0.44 (no significant bioaccumulative effect).

Tartaric acid: Log K<sub>ow</sub> = 0.24 (no significant bioaccumulative effect).

**Mobility in soil**

Low mobility in soil is expected.

**Other adverse effects**

None known.

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## Section 13: Disposal considerations

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**Safe handling for disposal and methods of disposal, including any contaminated packaging**

This material and its container must be disposed of as non-hazardous waste.

Inform appropriate authorities in accordance with local regulations in case of leakage into sewers etc. and dispose of contents/container in accordance with applicable national regulations.

Dispose/incinerate of contents/container and waste product in accordance with applicable local/regional/national/international regulations in a permitted waste incineration facility/ industrial waste facility or at licensed waste disposal sites.

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## Section 14: Transport information

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Not dangerous goods according to Canadian Transportation of Dangerous Goods (TDG)/IMDG/IATA.

**UN-no.:** None.

**UN proper shipping name:** None.

**Transport hazard class(es):** None.

**Packing group:** None.

**Environmental hazards:** None.

**Transport in bulk, if applicable:** Not applicable.

**Special precautions:** None.

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## Section 15: Regulatory information

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**Safety, health and environmental regulations specific to the product:****Inventories**

Status on Non-Domestic Substances List/Domestic-Substance List (N-DSL/DSL) (Canada):

All ingredients of this product are DSL Listed.

This SDS has been prepared to meet requirements according to Canadian WHMIS 2015.

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**Section 16: Other information**

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**Abbreviations:**

ACGIH = American Conference of Governmental Industrial Hygienists

AIHA = American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

EC<sub>50</sub> = Effect Concentration 50%

FW = Fresh Water

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LC<sub>50</sub> = Lethal Concentration 50%

LD<sub>50</sub> = Lethal Dose 50%

NIOSH = National Institute for Occupational Safety and Health

NTP = National Toxicology Program

OSHA = Occupational Safety and Health Administration

STEL = Short-term exposure limits

TWA = Time Weighted Average

WHMIS = Workplace Hazardous Materials Information System

**Literature:**

ECHA diss. = REACH Registration dossier from ECHA's home page.

IARC = International Agency for Research on Cancer

RTECS = Register of Toxic Effects of Chemical Substances

**Other information:**

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

The above information, which is accurate to the best of our knowledge and belief, describes the safety aspects of our product but does not warrant any product properties.

**Changes since the previous edition:**

Not relevant.

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